

REMARKS

I. STATUS OF THE CLAIMS

Claims 45-51, 54-55, 58-60 and 66-68 are pending. Claims 53 and 57 are canceled. Claims 45-50, 54-55, 58, and 68 have been amended. Support for the amendments can be found on page 31 and in the Sequence ID Listing. No new matter has been added.

II. OBJECTION IS NOT PROPER

Applicants elected Group I involving SEQ ID NO:2 in response to the Restriction Requirement dated June 12, 2006. Claim 45 is a proper linking claim because it recites a genus that links different species. The MPEP states:

The linking claims must be examined with, and thus are considered part of, the invention elected. When all claims directed to the elected invention are allowable, should any linking claim be allowable, the restriction requirement between the linked inventions must be withdrawn. Any claim(s) directed to the nonelected invention(s), previously withdrawn from consideration, which depends from or requires all the limitations of the allowable linking claim must be rejoined and will be fully examined for patentability. Where the requirement for restriction in an application is predicated upon the nonallowability of generic or other type of linking claims, applicant is entitled to retain in the application claims to the nonelected invention or inventions. MPEP § 809.

It does not matter that Applicants did not elect Group II, so long as there is a proper linking claim in the application.

Applicants note that should claims 54 and 63 both be deemed allowable, Applicants will cancel one of the two claims.

III. REJECTIONS UNDER 35 U.S.C. § 112

A. Claims 45-50 and New Claim 68 Are Adequately Described

The Action rejects claims 45-50 and new claim 68 under 35 U.S.C. § 112, first paragraph, as containing subject matter that was not described in the specification to reasonably convey to one skilled in the relevant art that the inventors had possession of the claimed invention at the time the application was filed. The Action cites to the *Regents of the Univ. of California v. Eli Lilly*, 119 F.3d 1559, 1568, 43 U.S.P.Q.2d 1398, 1406 (Fed. Cir. 1997) as requiring disclosure of “relevant identifying characteristics” sufficient to convey to one skilled in the art that the inventors had appreciated that the set of six peptides first formulated in the claims presented on 22 July 2003 could define a polypeptide of the claimed invention at the time the application was filed. Applicants respectfully traverse this rejection.

The issue is simply whether the “description clearly allows persons of ordinary skill in the art to recognize that he or she invented what is claimed.” MPEP 2163.02 (citing *In re Gosteli*, 872 F.2d 1008, 1012, 10 U.S.P.Q.2d 1614, 1618 (Fed. Cir. 1989)). The reliance on the case of the *Regents of the Univ. of California v. Eli Lilly* does not support the rejection because Applicants recite “relevant identifying characteristics” in the claims. The claims set forth structural characteristics in the form of amino acid residues that are limitations of the claimed polypeptide.

As discussed in earlier responses, the specification clearly sets forth that Applicants considered proteinaceous molecules of at least five contiguous amino acids from SEQ ID NO:2, SEQ ID NO:8 and SEQ ID NO:10 to be part of their invention. Any skilled person reviewing the specification would appreciate that that means any five contiguous amino acids from those sequences is contemplated as the invention and that Applicants were in possession of such molecules because they were in possession of the entire sequences for SEQ ID NO:2, SEQ ID

NO: 8, and SEQ ID NO:10. A high school student with a rudimentary understanding of molecular biology could set forth all the different peptides contemplated by the inventors based on the proteinaceous molecules contemplated on page 31 of the specification coupled with the disclosure of the sequences for SEQ ID NO:2, SEQ ID NO:8, and SEQ ID NO:10.

Applicants respectfully request this rejection be withdrawn.

B. Claims 45-50, 55, and 57-60 Are Enabled

The Action rejects claims 45-50, 55 and 57-60 under 35 U.S.C. § 112, first paragraph, as not enabled by the specification to use the claimed invention. (The Action does not dispute that the claimed invention could be made.) It contends that the specification does not enable the use by the artisan or the public of the indistinct genera described by the rejected claims because the specification fails to teach the artisan how to select from the myriad of peptides and polypeptides within the scope of the claim anything, other than SEQ ID NO:2 itself, with which to raise an antibody that can recognize anything in particular. The Action further argues that the specification fails to provide any meaningful guidance and that this falls short of the enablement standard. Applicants respectfully request this rejection be withdrawn.

No evidence has been provided that the claimed polypeptides cannot be used. Instead, there is only examiner argument that the skilled artisan might have to test different polypeptides for the production of antibodies. Applicants note that antibody production is simply *one* use for which the claimed polypeptides could be used without expending undue experimentation. Moreover, the Action does not explain why undue experimentation would be required to use different polypeptides in the production of antibodies. That screening may be required does not mean “undue experimentation.” Satisfaction of the enablement requirement is not precluded by the necessity of some experimentation. *See Atlas Powder Co. v. E.I. duPont De Nemours & Co.*, 750 F.2d 1569, 1576, 224 U.S.P.Q. 409 (Fed. Cir. 1984).

Another use for the polypeptides could be to make chimeric or fusion proteins (specification at pages 25-27), which have a variety of uses. For example, polypeptides could be used to identify agents that may bind a part of the SENP1 molecule (specification at pages 47-48). There are a number of uses for the claimed polypeptides and the examiner has not provided a single reason why their use would require undue experimentation.

Applicants respectfully note that “it is incumbent upon the Patent Office...to explain *why* it doubts the truth or accuracy of any statement in a supporting disclosure and to back up assertions of its own with acceptable evidence or reasoning which is inconsistent with the contested statement.” MPEP 2164.04 (quoting *In re Marzocchi*, 439 F.2d 220, 224, 169 U.S.P.Q. 367, 370 (CCPA 1971)).

The specification enables the use of polypeptides having all or part of recited sequences, and therefore, the claims meet the requirement of 35 U.S.C. §112, first paragraph. Applicants respectfully request that this rejection be withdrawn.

IV. REJECTIONS UNDER 35 U.S.C. § 102

A. Claims 45-50, 53, and 68

Claims 45-50, 53, and 68 are rejected under 35 U.S.C. § 102(e) as being anticipated by Hillman et al. US 2002/0106373. The claims have been amended to eliminate reference to SEQ ID NO:10 at this time, which renders this rejection moot. Applicants reserve the right the pursue claims directed to all or part of SEQ ID NO:10 in a continuation or divisional application.

V. REJECTIONS UNDER 35 U.S.C. § 103

A. Claims 55, 57, and 58 Are Nonobvious over Accession Number AA236084

Claims 55, 57, and 58 are rejected under 35 U.S.C. § 103(a) as being unpatentable over the human cDNA clone IMAGE:684275 having the GenBank Accession No. AA236084 and published in 1997 by the Cancer Genome Anatomy Project of the National Cancer Institute,

already of record, in view of Edwards *et al.*, U.S. Patent 6,222,029. Applicants respectfully traverse this rejection.

The rejected claims recite a polypeptide having “at least 130 contiguous amino acids of SEQ ID NO:2.” Genbank Accession Number AA236084 is said to encode a 114-amino acid region of SEQ ID NO:2 from position 214 to position 328, inclusive. This does not teach all the elements of the claimed invention, which requires 130 contiguous amino acids from SEQ ID NO:2. Therefore, this combination of references cannot render obvious the claimed invention.

Applicants respectfully request this rejection be withdrawn.

B. Claims 55, 57, and 58 Are Nonobvious over Accession Number AA236014

Claims 55, 57, and 58 are rejected under 35 U.S.C. § 103(a) as being unpatentable over the human cDNA clone IMAGE:684275 having the GenBank Accession No. AA236014 and published in 1997 by the Cancer Genome Anatomy Project of the National Cancer Institute, already of record, in view of Edwards *et al.*, U.S. Patent 6,222,029. Applicants respectfully traverse this rejection.

The rejected claims recite a polypeptide having “at least 130 contiguous amino acids of SEQ ID NO:2.” Genbank Accession Number AA236084 is said to encode a 128-amino acid region of SEQ ID NO:2 from position 280 to position 407, inclusive. This does not teach all the elements of the claimed invention, which requires 130 contiguous amino acids from SEQ ID NO:2. Therefore, this combination of references cannot render obvious the claimed invention.

Applicants respectfully request this rejection be withdrawn.

C. Claims 55, 57, and 58 Are Nonobvious over Accession Number AA330056

Claims 55, 57, and 58 are rejected under 35 U.S.C. § 103(a) as being unpatentable over the human cDNA clone of Adams *et al* (designated EST33924) having the GenBank Accession No. AA330056 and published in 1997 by the Cancer Genome Anatomy Project of the National

Cancer Institute, already of record, in view of Edwards *et al.*, U.S. Patent 6,222,029. Applicants respectfully traverse this rejection.

The rejected claims recite a polypeptide having "at least 130 contiguous amino acids of SEQ ID NO:2." Genbank Accession Number AA330056 is said to encode a 91-amino acid region of SEQ ID NO:2 from position 379 to position 469, inclusive. This does not teach all the elements of the claimed invention, which requires 130 contiguous amino acids from SEQ ID NO:2. Therefore, this combination of references cannot render obvious the claimed invention.

Applicants respectfully request this rejection be withdrawn.

CONCLUSION

Applicants believe that the present document is a full and complete response to the Action dated August 23, 2007. The present case is in condition for allowance, and such favorable action is respectfully requested.

The Examiner is invited to contact the undersigned Attorney at (512) 536-3081 with any questions, comments or suggestions relating to the referenced patent application.

Respectfully submitted,



Gina N. Shishima
Reg. No. 45,104
Attorney for Applicants

FULBRIGHT & JAWORSKI L.L.P.
600 Congress Ave., Suite 2400
Austin, Texas 78701
(512) 536-3081
(512) 536-4598 (facsimile)

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